What is claimed is:

1.   A system for sending and receiving serial data comprising:

a plurality of secondary stations for receiving a refresh request and for sending one of data and a response to a primary station; and

5   the primary station for sending the refresh request and a polling request asking for sending data, and for retrying one of the polling request and the refresh request within the same determined time in case of failure of receiving one of the data and the response.

2.   The system for sending and receiving the serial data of claim 1, 10   wherein the primary station includes a retry number counter for counting one of the polling request retried and the refresh request retried, wherein retrying of one of the polling request and the refresh request is stopped after one of a determined number and determined time has passed.

3.   The system for sending and receiving the serial data of claim 2, 15   wherein the primary station includes a record corresponding to each of the secondary stations, wherein a retry flag is set, when a normal response is failed to receive in each response, wherein the retry flag remains in the record corresponding to each of the secondary stations after stopping retrying of one of the polling request and the refresh request.

20   4.   The system for sending and receiving the serial data of claim 1, wherein the secondary station responds in a response frame of a compact type by using a flag code which is different from a flag code of the primary station.

5.   The system for sending and receiving the serial data of claim 1, wherein the secondary station returns a busy response, when data for 25   responding for the polling request from the primary station are failed to be

prepared, wherein the primary station retries a polling request for the secondary station which has sent the busy response.

6.   The system for sending and receiving the serial data of claim 1, wherein the primary station stores information on a type for each of the secondary stations, wherein the primary station skips sending the polling request in the determined time for the secondary station having failure to respond within the determined time.

7.   The system for sending and receiving the serial data of claim 1, wherein the primary station stores information on a type for each of the secondary stations, wherein the primary station ignores data from the secondary station having failure to respond within the determined time.

8.   The system for sending and receiving the serial data of claim 1, wherein the primary station stores an error state of each of the secondary stations, wherein the primary station sends an initialization request to the secondary station, when the secondary station in the error state returns to a normal response state.

9.   The system for sending and receiving the serial data of claim 8, wherein the primary station stores information of a type for each of the secondary stations, wherein the primary station collects information of the secondary station before sending and compares the collected information with the information of the type before sending the initialization request.

10.   The system for sending and receiving the serial data of claim 1, wherein one of the primary station and the secondary station sends a high level signal for a short period after sending a frame.

11.   A system for sending and receiving serial data comprising:

a primary station for sending a refresh request and a polling request in a specific order without having each secondary station address in determined time; and

a plurality of secondary stations for responding to the primary station, following to the specific order.

12. The system for sending and receiving the serial data of claim 11, wherein the secondary station has one of a counter and a timer monitoring one of a response from another secondary station and time, and makes a response of its own station after one of a respectively set order and time.

13. The system for sending and receiving the serial data of claim 12, wherein the secondary station has a monitoring responder for responding to the primary station in a determined order after the response time is passed in monitoring.

14. The system for sending and receiving the serial data of claim 11, wherein the primary station provides a field for showing that a normal response to the refresh request for the secondary station can be skipped, wherein the secondary station stops a normal refresh response based on the field.

15. The system for sending and receiving the serial data of claim 14, wherein the primary station provides a field for showing that an error report from the secondary station is possible in the refresh response, wherein the secondary station has a monitor for monitoring an error in an own station, wherein the secondary station returns an error response based on the field.

16. A method for sending and receiving serial data having a plurality of secondary stations receiving a refresh request from a primary station and

sending data to the primary station responding to a polling request, the method comprising:

retrying for sending one of the refresh request and the polling request to the secondary station within the same determined time in case of failure of receiving a response.

17.   The method for sending and receiving the serial data of claim 16, wherein the primary station includes a retry number counter for counting one of the polling request retried and the refresh request retried, and wherein the primary station stops retrying for sending one of the refresh request and the polling request.

18.   The method for sending and receiving the serial data of claim 16, further comprising:

responding in a response frame of a compact type from the secondary station by using a flag code which is different from a flag code of the primary station.

19.   The method for sending and receiving the serial data of claim 16, further comprising:

returning a busy response from the secondary station, when data for responding for the polling request from the primary station are failed to be prepared; and

retrying for sending a polling request from the primary station to the secondary station which has sent the busy response.

20.   The method for sending and receiving the serial data of claim 16 comprising:

storing information on a type for each of the secondary stations in the

primary station; and

skipping sending the polling request in the determined time from the primary station to the secondary station having failure to respond within the determined time.